UK Subject to change

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USER'S MANUAL

Ferm 12" Contractors Saw

FZT-315

CE

Ferm®

Art.nr. 720095
Screwfix Art.nr. 16057

UK English

FERM 12" CONTRACTORS SAW
FZT-315
USERS MANUAL

TECHNICAL SPECIFICATIONS

Voltage	230 V~
Frequency	50Hz
Power Input	2000 W
R.P.M	2950
45° Cut depth	65 mm
90° Cut depth	90 mm
Blade diameter	315 mm
Blade width	3 mm
Arbour hole	30 mm
Weight / gross	45 kg
Height / assembled	805 mm
Width / assembled	700 mm
Depth / assembled	950 mm
Lpa (sound pressure level)	93.62 dB (A)
Lwa (sound power level)	106.84 dB (A)

SAFETY INSTRUCTIONS

The following pictograms are used in these instructions for use:

Denotes risk of personal injury, loss of life or damage to the tool in case of non-observance of the instructions in this manual.

Denotes risk of electric shock.

Carefully read this manual before using the machine. Make sure that you know how the machine functions and how to operate it. Maintain the machine in accordance with the instructions to make sure it functions properly. Keep this manual and the enclosed documentation with the machine.

Ferm products are manufactured to high quality standards, they are safe and fit for purpose at time of sale, but all tools can be dangerous if the correct precautions are not taken. Always follow these instructions, do not carry out the operation until you are sure you can do so in safety. Remember to consider the work environment for safe operation in addition to the safe operation of the tool.

Warning! *When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before attempting to operate this product. Save these instructions for future reference.*

PERSONAL SAFETY

Use Personal Protection Safety Equipment
Protect eyes with safety glasses or goggles note: the use of safety protective eyewear without the CE mark can lead to serious injury if the lens breaks. A suitable dust mask should be worn if cutting, drilling or sanding is dusty, in particular chipboard or MDF.
Approved safety footwear and headgear should worn as appropriate, for example on building works or when heavy weights are involved. Wear suitable gloves and apron to protect against sparks/debris. Wear earplugs or ear defenders.

Dress properly
Do not wear loose clothing or jewellery. It can get caught in moving parts. Non-skid footwear is recommended when working out doors. Wear protective hair covering to contain long hair.

Stay alert
Watch what you are doing. Use common sense. Do not operate tools when tired or after taking alcohol or prescription/ non-prescription drugs.

OPERATIONAL SAFETY

Warning! *This machine can produce noise/fine dust, which can be harmful to your health. Anyone in the work area should wear a suitable dust mask, ear defenders and other protection equipment as appropriate.*
Use dust extraction.

Concentrate
Routine and repetition can lead to mistakes. Remember that a slight lack of concentration can result in serious injuries in a split second.

Keep work area clean
Cluttered areas and benches invite injuries.

Consider the work environment
Do not expose power tools to rain or use them in damp or wet locations. Keep work area well lit. Do not use power tools in the presence of flammable liquids, vapours or gases.

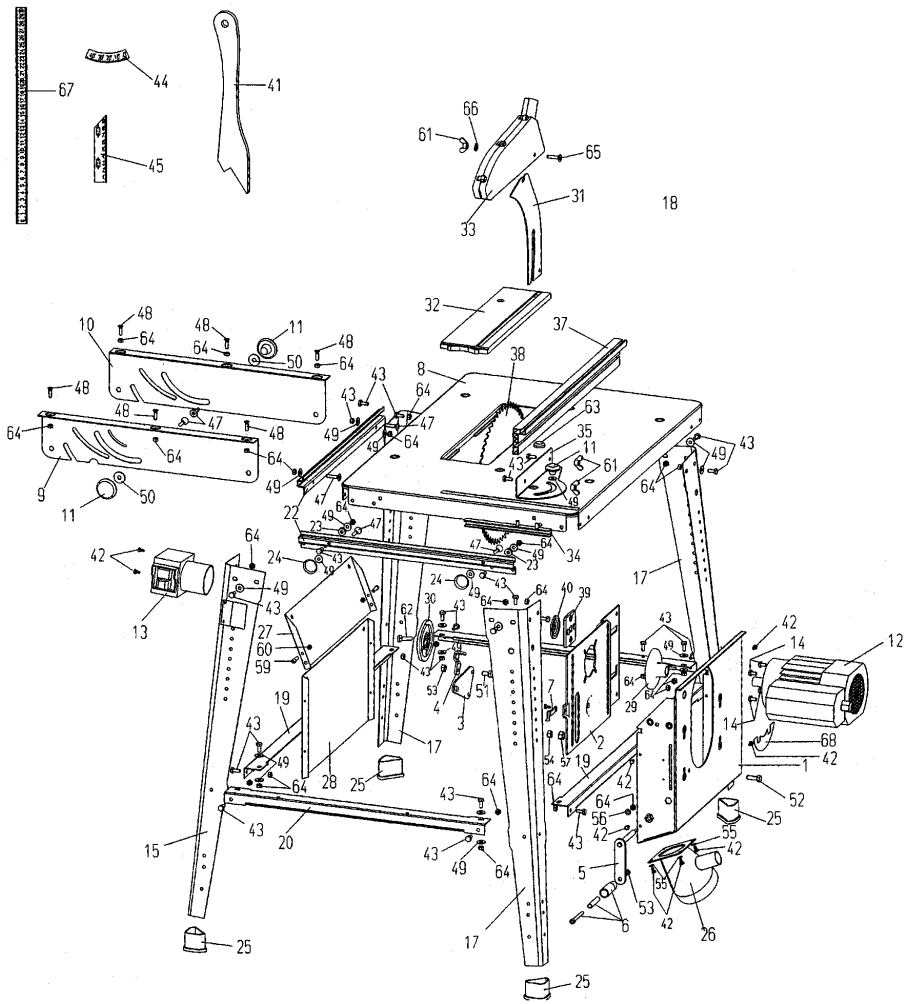
Guard against electric shock
This unit contains dangerous voltages. Use a RCD (residual current device) to provide protection against electrical shock. Prevent body contact with grounded surfaces (e.g. pipes or radiators).

Keep children and pets away
Do not let children or pets come into contact with the tool, extension cable or work area.

Do not force the tool
It will work better and safer at the rate for which it was intended.

Use the right tool
Do not force small tools or attachments to do the job of a heavy-duty tool. Do not use tools for purposes for which they were not intended; for example do not use a circular saw for cutting trees or logs.

EXPLODED VIEW



SPARE PARTS LIST FZT-315

REF NR	DESCRIPTION	FERM NR
5	HANDLE	407610
6	KNOB FOR HANDLE	407611
11	SCREW WITH PLASTIC KNOB	407612
12	MOTOR	407613
13	SWITCH	407614
24	SCREW WITH PLASTIC KNOB	407615
25	RUBBER FOOT	407616
29	FLANGE INSIDE	407617
30	FLANGE OUTSIDE	407618
31	SPLITTER	407620
32	TABLE INSERT	407621
33	COVER FOR SAWBLADE	407622
35/37/43/49/61/63/11	SAW GUIDE COMPLETE	407623
38	SAW BLADE	420210
62	BOLT LEFT	407624

Do not abuse the cable
Never carry the tool by the cable or pull it to disconnect it from the power socket. Keep the cable away from heat, oil and sharp edges. Do not touch the metal plug pins when connecting or removing the plug.

Do not over-reach
Keep a proper footing and balance at all times.

Disconnect tools from power supply
Switch off and unplug the saw from the power supply when not in use and before servicing.

Always switch off and unplug the saw from the power supply before making adjustments, cleaning or changing blades.

Remove adjusting keys and wrenches
Ensure that they are removed from the tool before switching on.

Avoid unintentional starting
Do not carry or move plugged in tools with your finger on the switch.
Check that the switch is off before plugging in to socket.

Extension cables
Use only three core earthed extension cables suitable for the power input of the tool (minimum cable size 1.5mm² for 5 metres and 2.5mm2 for 10 metres). Plug into an earthed socket only.
When using a cable reel unwind it fully. Do not use extension cables over 10m.

Outdoor use extension cables
When the tool is used outdoors use only an extension cable intended for outdoor use and marked accordingly. Use a RCD (residual current device) to provide protection against electrical shock. Do not use in rain or damp conditions.

Connect a dust extraction device
Whenever there are facilities for fitting a dust or fume extraction system, make sure it is connected and used.

Use recommended accessories
The use of any other accessory or attachment other than recommended in the instructions or catalogue may present a risk of personal injury.

BEFORE ASSEMBLING THE SAW

This saw must be fully assembled before use.
If you have not used a circular saw before, make sure you fully understand the machine, assembly and operating procedures before using it. Beginners can seek help and advice from instructors, local technical collage courses or from professionals.
This saw is not for use by persons under the age of 18.
Assemble the saw on a level stable bench or surface. ***This is a heavy unit, it weighs 45 kg, so get someone to help you both assemble and move it.***

Ensure the saw is unplugged from mains.

CHECK THE POWER SUPPLY
Check the voltage on the Machine corresponds with your power supply and that the socket, plug and lead are in good serviceable condition.

TOOLS REQUIRED
The following tools are required to assemble this saw:
- 19 X 13 mm Spanner (supplied)
- Tommy Bar (supplied)
- 10/17mm O/E Spanners (not supplied)
- Circlip pliers, small (not supplied)
- Cross Head Screwdriver (not supplied)
- Movable spanner, 6" or 8" (not supplied)

ASSEMBLY

Check package contents
Check contents against list in this manual to make sure each item is present.

Check for damage
Before using this item check each part listed is undamaged.

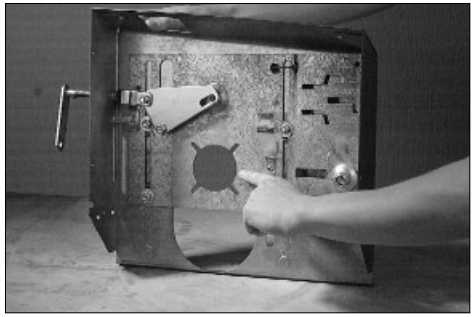
Save packaging
Save major packaging for return of product for service or repair.
Remove all the internal packing, which protects the saw in transit.

Route the mains lead
Keep the mains lead away from the
Saw and ensure that it cannot get caught in the workpiece or blade/blade guard.

START ASSEMBLY
Follow these steps to assemble the saw, refer to parts illustration at the back of this manual and the images following each section.

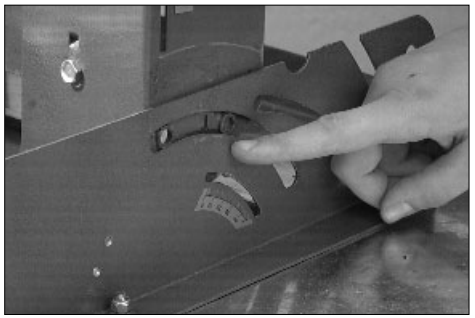
The saw is assembled with the saw table facing downwards i.e. upside-down until the frame assembly is complete. Assembly is then completed with the saw the right way up.

Check Motor Support Assembly (item 2)
- Check that the Motor Support Assembly is assembled correctly.

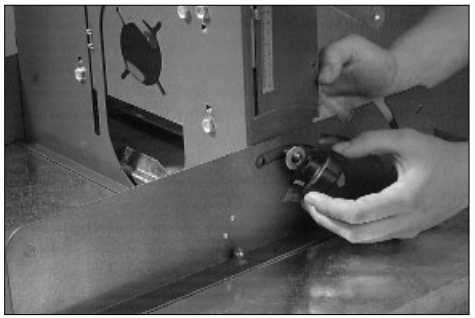


Fix Support Brackets (items 9 and 10)
- Bolt the brackets to the saw top plate with the flanges facing towards the ends of the saw table. Use 6 X C/S Set pins and self-locking nuts (washers not required) do not tighten the fixings fully until after stage 3.

Fix the Motor Support Assembly
- Put the motor support assembly between the support brackets with the handle facing the longer end of the saw table. Use 4 x M8 bolts and self-locking nuts (no washers) to fix. Do not over tighten the fixings; the motor support assembly has to be free to move. Tighten the Support Bracket fixings.

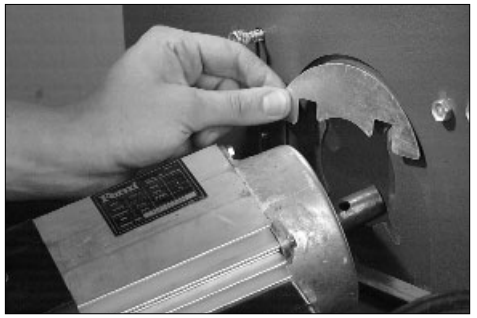


Install the Locking Hand Wheels (items 11 - the larger of the two pairs)
- Push the M6 x 30 Coach Bolts through the square holes in the Motor Support Assembly from the inside. Put a washer on the outside and then screw the Hand Wheels onto the bolt.



Fix the Motor (12)

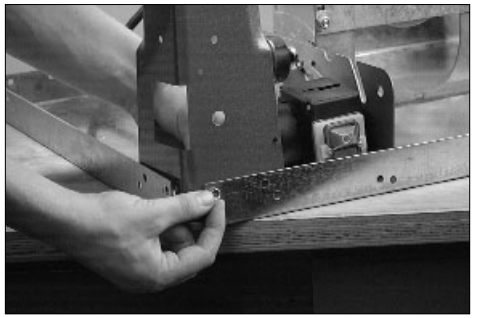
- Remove the left hand bolt and saw blade washers from the shaft of the Motor Assembly (12).
- Fix the motor with (electrical box facing away from the saw table) to the Motor Support Assembly with 4 x M6 –16mm hex bolts and washers.
- Put the bolts/washers in loosely and slide the two Adjusting Plates (68) in from the motor side.
- Tighten the bolts with a 10mm spanner.



Fix the Legs (15)

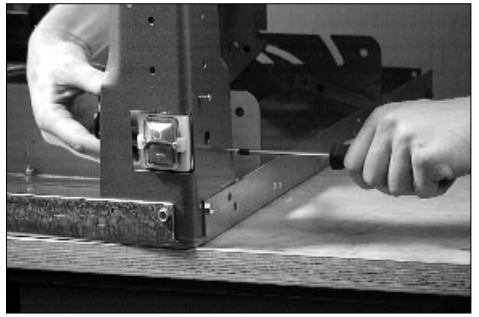
- Fix the Motor Switch Leg first, use 2 x M6 –16mm bolts/washers self-locking nuts. Fix through inner holes only, the other fixings are added later.
- Do not tighten the fixings yet.
- Fix the other legs in the same manner.

Note: The legs and corners of the saw table are numbered to locate the leg in the appropriate corner.



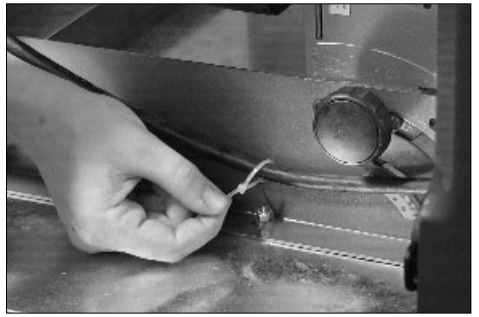
Fix the On/Off Switch

- Fix the on/off switch with the green button facing the saw table. Use the two 15mm dome head self-tapping screws, tighten with a crosshead screwdriver.



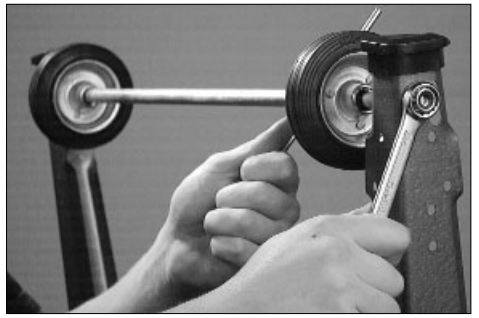
Fix the Cable

- Fix the cable with the two cable ties leaving enough slack Motor Assembly to rotate.

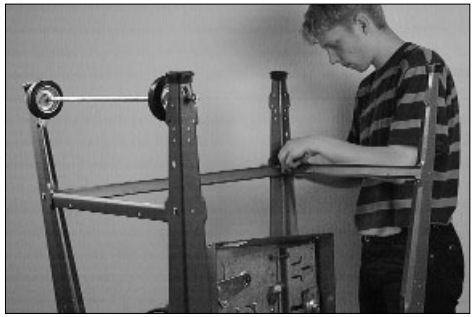


Assemble and fix the Axle Assembly

- Locate the axle rod, two wheels, 4 circlips and the two large self-locking nuts.
- Put a circlip into each of the inner grooves in the axle, add the wheels and put the other circlips into the outer grooves.
- Install the axle assembly, the rod ends go through the L shaped cutouts in the legs marked 3 and 4. Screw the nuts on and tighten with a 17mm spanner as shown.



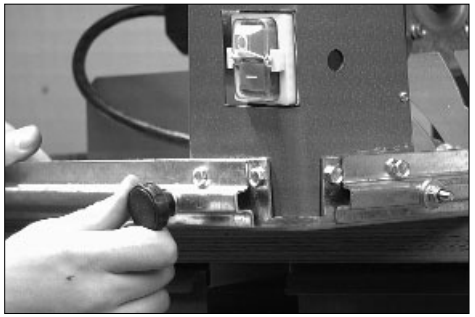
Fix the Leg Supports
- Locate the two long (19) and two short (20) leg supports.
- Fix as shown using M6 x 16mm bolts, self-locking nuts and washers.
- Install with the wider face of the angle facing towards the underside of the saw table. Do not tighten the bolts yet.



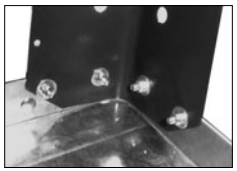
Install the Dust Extractor Adaptor (26)
- Use 4 x M4 x 10mm hex bolts and washers to fix the adaptor, the large hole faces away from the motor.

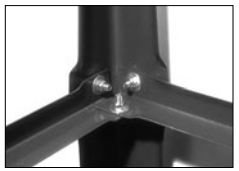
Assemble the Cross Cut Fence Guide Rail (item 22)
- Assemble the guide on the switch end (long edge) of the saw table using two M6 x 16mm hex bolts, self-locking nuts and washers. Put the bolts through the guide, table and leg then add washer and nut. Tighten the fixings.

Assemble the Rip Fence Guide Rail (item 22)
- Assemble in the same manner as the Cross Cut Guide then put two M6 x 35mm Coach Bolts through the square hole in the table from the inside and through the guide add the rubber washers then a metal washer and finally screw on the smaller hand wheels (24).



Finish Bolting the Frame Together
- Install the rest of the M6 x 16mm bolts, nuts and washers and tighten all the fixings. There should be four fixings where the leg joins the saw table and three fixings where the support bar joins the leg as shown.
- Push the plastic covers (item 25) on to the ends of the four legs





Now turn the saw over so it's the right way up!

Check for damaged parts
Do not use a tool with damaged parts, before further use a damaged tool must be carefully checked by a qualified person to determine that it will operate properly. Check for alignment of moving parts, binding or breakage of parts, mounting and other conditions that may affect its operation.
A damaged part or guard should be properly repaired by an authorised service centre, unless indicated otherwise in the instruction manual. Have defective switches replaced by an authorised service centre. Do not use a tool if the switch does not turn on and off.

Have your tool repaired by an expert
This appliance is manufactured in accordance with relevant safety standards. Only experts must carry out repairing of electrical appliances, otherwise considerable danger for the user may result.

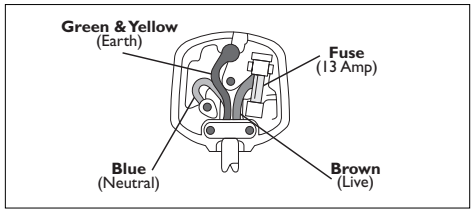
Storing tools
When not in use tools should be stored in the dry, out of reach of children.

Lubrication
The machine requires no user lubrication

ELECTRICAL INFORMATION
This product is complete with a pre-wired mains plug.
If the plug needs replacing follow these instructions.

Wire correctly
The wires in the mains lead are coloured in the following way:

BLUE	• Neutral
BROWN	• Live
GREEN/YELLOW	• Earth



Securing wires
Secure wires carefully and firmly to the correct terminals. Secure the mains cable in the plug cord grip firmly
Fit a 13-amp fuse. If a 13amp (BS1363) plug is used a (BS 1362) ASTA approved 13-amp fuse must be fitted.

Recycle/Dispose of old plug and cable
Prevent inadvertent connection to socket and risk of electric shock.

ENVIROMENT
Recycle the packaging according to the identification marks on it.
At the end of the product or its accessories life please recycle where facilities exist. Phone the Helpline for current advice on recycling.

Helpline
For any questions relating to operational or safety matters contact:

Ferm Customer Helpline on:	**0115 966 1199**
Monday-Friday	**8am – 6pm**
Saturday	**9am – 1 pm**

GUARANTEE
The guarantee conditions can be found on the separately enclosed guarantee card.

CE DECLARATION OF CONFORMITY (UK)

We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents

EN-1870-1, EN-60204-1,
EN-55014-1, EN-55014-2,
EN-61000-3-2, EN-61000-3-3

in accordance with the regulations:

98/37/EEC
73/23/EEC
89/336/EEC

Approved by TÜV-Rheinland,
Product Safety GmbH,
Certificate Numbers: S1 2057251 & CC 9930375

from 01-09-2002
GENEMUIDEN NL
W. Kamphof
Quality department

OPERATION

- Plug into a suitable mains supply and switch on.

To switch the saw ON
Depress the green button on the switch.

To switch OFF
Depress the red button on the switch.

Note: This is a NVR (no volt release switch) and will not operate without the power connected.

DURING USE

- Let the blade come to full speed before cutting the work piece.
- Do not force the saw. Press the workpiece forwards with gentle pressure. Let the saw do the work.
- Check material for foreign bodies. For example check for nails, screws or dirt etc.
- Do not use your hands to push the work piece. Use a suitable push stick Use additional support to feed long/wide lengths.
- Be aware that this is a powerful saw. Off line or twisted workpieces can kick causing injury.
- Never saw several workpieces at the same time.
- Use constant gentle pressure.
- If the blade seizes in the cut, switch off, unplug and open the cut with a suitable tool before pulling the blade out. Never switch the saw on with the blade jammed. Never apply lateral pressure to the blade
- Do not use the machine without the guard in position. Do not override the blade guard, it will rise/tilt automatically.
- Never apply lubricant to the saw blade while it's rotating or the machine is switched on.
- Regularly inspect the blade (unplug first) during use for signs of damage or wear and sharpen/replace when required.
- Take care when sawing scrap. It's easy to loose concentration if the work piece is not important.
- Replace the table inset if worn or damaged. Spares are available from the Helpline.
- Use the correct saw blades. Make sure they are the correct type of saw blades for the machine, rated for at least 3000 revolutions per minute and not more than 315mm in diameter. For spares phone Helpline. Do not use HSS blades with this saw.
- Switch the machine off before removing the plug from the mains socket.
- Be careful. Keep your hands away from the blade. Always stand to one side of the blade line when operating the saw.
  Use particular care when cutting thin/small pieces or slotting. Consider using another machine if the workpieces are very small
- Use personal protection equipment. Always wear suitable safety glasses and ear defenders, plus other items as appropriate.

MAINTENCE, CARE AND REPAIR

Switch off and unplug the machine before carrying out any cleaning, adjusting or changing blades.

CLEANING

Clean the saw with a soft brush or a cloth just moistened with soapy water (dry off afterwards).
Do not use flammable liquids to clean the saw, they can damage the plastic parts and are a fire risk.

FAULTS

Switch OFF immediately at the mains plug and remove the plug when:

- The plug or cable is damaged.
- The switch on the machine is defective.
- You smell or see smoke caused by scorched insulation in the machine.

The motor runs hot (over 70 degrees C)

- The motor has been overloaded.
  Cut more slowly.
- Remove sawdust from vents, inside machine and around the motor.
- The motor is defective.
  Take to your local dealer for repair.

The saw does not work when switched on

- Damaged plug/fuse.
  Replace as required.
- Defective switch.
  Take to local dealer for repair.

The saw does not cut cleanly and wanders off line

- Readjust the fence
- The blade is blunt or bent
  Replace blade with suitable resharpened or new one.

The saw makes a lot of noise and does not run smoothly

- Take to your local dealer for inspection or repair.

The dust is not being extracted

- Clean the dust extractor port

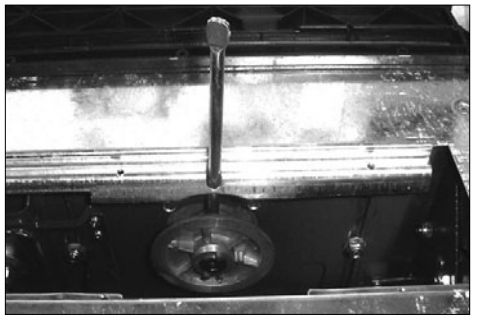
There are no user serviceable/repairable parts inside this unit. ***Qualified service engineers must carry out repair and servicing.***

MAINTAIN TOOLS WITH CARE

Keep the tool clean for better and safer performance.
Store the blades properly in accordance with the maker's instructions.
Follow instructions for changing accessories. Inspect tool and extension cables periodically and if damaged, have them repaired by a qualified person or authorised service body. Keep handles free from oil or grease. Keep the ventilation slots clean to prevent the motor overheating.

Put the Rear Flange (item 29) onto the Motor Shaft

- Put the flange on with the boss facing towards the motor. Line up the holes in the boss, shaft and saw table and insert the Tommy Bar (provided) through them as shown

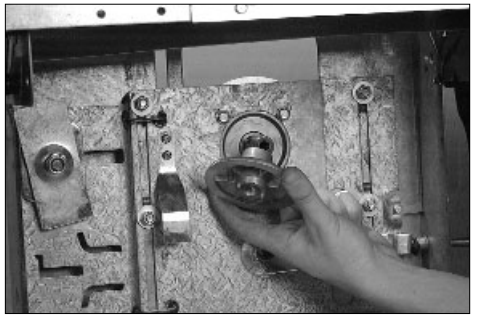


Install the Saw Blade (item 38)

- Remove the six M4 c/s 15mm crosshead screws and the Table Insert (item 32).

Use suitable gloves. Saw blades are very sharp!

- Put the saw blade onto the motor shaft with the teeth facing the motor switch end of the saw table. Make sure the fixing for the riving knife is not behind the blade, then put the outside flange onto the shaft and line up the pegs/holes in the two flanges.
- Screw the blade bolt (item 62) into the shaft end anticlockwise. Tighten with the 13mm end of the spanner (provided). Remove the Tommy Bar.

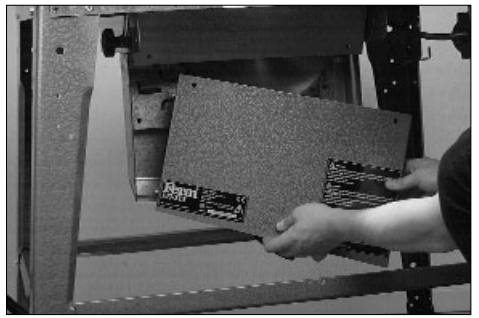


Assemble the Riving Knife (item 31)

- Slide the knife between the fixing plates (indicated by an arrow in previous picture). Adjust so there is a space of between 3 and 8mm between the knife and saw blade. Tighten with the 19mm end of the spanner (provided). Check that the blade can rotate and does not touch the knife, mounting or casing. If it does reinstall or adjust it.
- Check the knife is in line with the blade when viewed from the end of the saw table. Adjust as necessary.
- Reinstall the Table Insert with its six screws.
- If the blade touches the insert remove it and adjust by slacking off the six screws holding the Support Brackets referred to in Step 2 then move the Motor Support Assembly until the blade in lined up in the inserts slot. Retighten the fixings and replace the insert and screws.

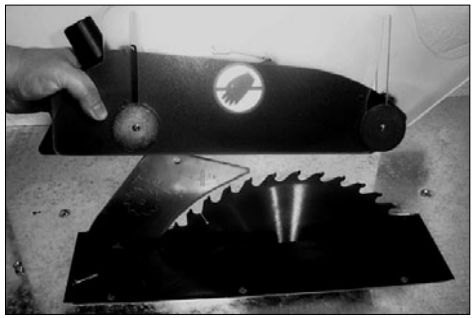
Fix the Motor Support Cover Plate Assembly (item 28)

- Fix the smaller top plate with two M6 x 16mm bolts, self-locking nuts and washers through the slots in the Motor support Brackets. Do not screw the fixings too tight; this part has to slide in the slots.
- Push the larger plate inside the box sides and secure with four M4 dome cross head set pins and spring washers.



Assemble the rest of the Saw Guard Assembly (item 33)

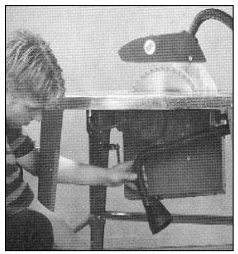
- Raise the blade up to its highest setting and put the Saw Guard Assembly on top of the riving knife with the hose spigot facing upwards. It is fixed to the top of the knife with the M6 dome crosshead set pin and self-locking nut supplied. Tighten the fixing then check to make sure the Guard Assembly rises and falls when you wind the blade up and down. Check that the side cheeks of the assembly are free to move up and down.

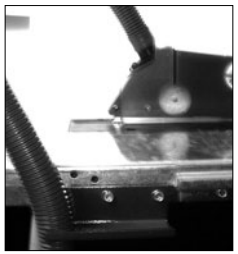


Never use this saw without the Guard and Riving Knife fitted and working properly.

Assemble the Dust Collection Hose and Bracket

- Push the Dust Collection Hose onto the spigots on the blade guard and the dust extractor adaptor as shown. Bolt the bracket (item 45) on the saw table with two M6 hex head x 16mm bolts, self-locking nuts and washers as shown, an alternative position for this bracket is on either side of the rear legs



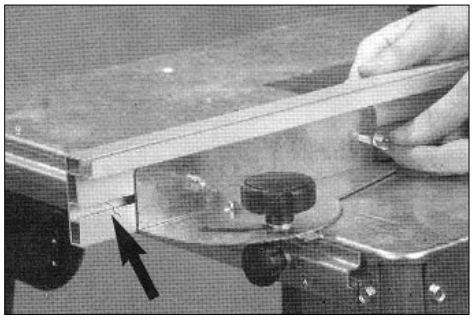


Assemble the Guide for Ripping (cutting with the grain)

- Attach the Fence to the Mitre guide with two M6 x15mm Bolts, wing nuts and washers as shown. Slide the assembly into the Rip Fence Guide.
- To adjust the angle, loosen the knob and rotate the guide to the desired angle (maximum 60o either side).

Note: The angle on the guide is for indication only.
For accurate angles test on a piece of scrap first and readjust as necessary.

- Finally clamp the fence in the desired position with the two hand wheels on the Rip Fence Guide.



Fix the Scale to the Saw Table

- Raise the Guard and slide the fence against the blade, check that it is parallel to the blade.
- Make a pencil mark in the scale depression where the fence crosses it.
- Remove the Fence Assembly and stick the scale '0' mark on the pencil mark.

Assemble the Guide for Crosscutting (cutting across the grain)

- Loosen the wing nuts and remove the Fence from the Mitre Guide.
- Install the mitre guide in the Crosscut Guide and remove the bolts, wing nuts and washers.

The Extension Table

- The saw is supplied with an extension table and two sets of brackets to support it at either:
- Right hand side of the Saw Table (use the short supports)
- Use two M6 hex head x 16 mm bolts, self-locking nuts and washers to attach the extension table's long edge (with the four notches) to the right hand of the saw table.
- Assemble the support brackets to the outer end of the extension table and the leg support using four M6 hex head bolts, self-locking nuts and washers.
- Line up the extension table with the saw table and tighten the fixings.
- Rear edge of the Saw Table (use the long supports) -
- Remove the two fixings from the rear face of the right hand leg.
- Use them and another to bolt the deeper of the short edges of the extension table to the rear edge of saw table.
- Assemble the support brackets to the outer end of the extension table and the leg support using four M6 hex head bolts, self-locking nuts and washers.
- Line up the extension table with the saw table and tighten the fixings.

BEFORE OPERATION

ADJUST THE BLADE HEIGHT AND BLADE ANGLE

Ensure the saw is unplugged from mains.

Adjusting the blade angle
The unit can saw at any angle up 45degrees.

- Slacken off the hand wheels on either side of the motor housing and push it to set to the desired angle. The angle is indicated on the degree scale. Screw the hand wheels in to lock.

Note: The degree scales are for indication only
For accurate angles test the set angle by sawing a piece of scrap first, measuring and adjusting the saw as required.

To adjust the blade height

Ensure the saw is unplugged from mains.

The blade height is adjusted with the crank handle on the front of the motor housing, each turn moves the blade 1.2cm.

- To adjust turn the handle until the blade is at the desired height.

The cut depth is indicated on the depth scale. The scale is for indication only, if a accurate cut depth is required measure from blade tip to table and set as required.

- Check the voltage on the saw corresponds with your power supply voltage and that the plug and lead are in good condition.
- Ensure the work area is well lit.
- It you use fluorescent tube lights install at least two which will negate the strobe effect that can make a revolving blade appear as if it's not moving.
- Check you have a blade suitable for the saw and the material being cut and that it is in good condition and secure. If any teeth are missing or the blade shows cracks or other damage, replace immediately.
- Do not use parts other than supplied with the machine to make the blade fit properly.
- Turn the saw blade by hand to see that it turns freely in all positions. If the blade touches any part of the table, fence or guard the saw must be readjusted before use.
- Check all adjusting screws are secure.
- Check that the saw in standing on a level stable surface and cannot move unexpectedly.
- Make sure the wheels are the upper position, so that all four legs are firmly in contact with the floor.
- Run the saw idle for 30 seconds. If there is any abnormal vibration or other fault, switch off, inspect and rectify before continuing.
- Check all fixings for tightness; repeat this after the first 5 hours of operation.

USING THE SAW

This saw is intended for use on wood, wood derived products only.

There are two types of cutting:

- Ripping
  Cutting the workpiece with the grain, i.e. lengthways.
- Crosscutting
  Cutting the workpiece across the grain.

Note: When cutting wood derived products such as plywood or MDF lengthwise sawing is referred to as ripping and crosswise sawing is referred to as cross cutting.
For both types of cutting you must use a fence.

RIPPING

- With the saw unplugged from mains set the fence to the desired width, make sure its parallel to the saw blade
- Set the blade height about 10mm higher than the thickness of the workpiece, (for bevel cuts set the blade angle also).
- Connect dust extraction and switch it on.
- Check you are wearing the correct personal safety equipment and the mains lead is well away from the saw/work area and cannot get tangled.
- Check the blade guard works properly.
- With the workpiece away from the blade, plug into the mains and switch on.
- Stand in front of the saw and to one side of the blade line and start the saw.
- Let the motor come to full speed.
- Place the workpiece on the saw table square against the fence.
- With a push stick use gentle, firm pressure push the workpiece forward through the saw blade - no not force it – keep the workpiece in contact with the saw table at all times.

Always keep your hands at least 100mm from blade.
Never pull a workpiece backwards.

- When the cut is complete, switch off/unplug before removing the scrap/or debris from the saw.

CROSSCUTTING

- Remove the fence and put the mitre guide the left-hand crosscut guide rail.
- Set the angle on the mitre guide.
- Proceed as for ripping remembering to keep the workpiece against the vertical face of the mitre guide and in contact with the saw table. Slide the mitre guide forward to complete the cut.
- Use a push stick as necessary.